DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 70.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-005349
Date Inspected: 06-Feb-2009

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Japan Steel Works

OSM Arrival Time: 830
OSM Departure Time: 1730
Location: Muroran, Japan

CWI Name: MaKhmud Ashadi

Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**CWI Present:**	☑ Yes	☐ No	
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☑ Yes	☐ No	☐ N/A
				Approved WPS:	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☑ Yes	☐ No	☐ N/A

Bridge No: 34-0006
Component: Tower, Jacking and Deviation saddle

Summary of Items Observed:

Steel Structure Welding Shop:

W2E3 West Deviation Saddle Steel Structure: Caltrans Quality Assurance Inspector (QAI) representative observed two welders perform FCAW process on stem plate weld E3S-2L of W2E3 west deviation saddle. The filler metal and shield gas used for FCAW is Hoballoy wire TM-95K2, 1.6mm diameter with 100% C02. The entire welding zone has been preheated to a minimum 110C prior welding. The FCAW welding process and parameters have been monitored and recorded by CWI inspector Mr. Chung Kuan. Based on Caltrans QA observation, the FCAW welding operation appeared to be in general compliance with requirements of AWS D1.5 2002 and Caltrans contract documents.

W2E2 West Deviation Saddle Casting and Steel Structure Joint Section: Caltrans QAI representative observed two welders perform FCAW process on a stem plate weld E2S-2U of W2E3 west deviation saddle. The filler metal and shield gas used for FCAW is Hoballoy wire TM-95K2, 1.6mm diameter with 100% C02. The entire welding zone has been preheated to a minimum 110C prior welding. The FCAW welding process and parameters have been monitored and recorded by CWI inspector Mr. Chung Kuan. Based on Caltrans QA observation, the FCAW welding operation appeared to be in general compliance with requirements of AWS D1.5 2002 and Caltrans contract documents.

Casting Shop:

W2E3 West Deviation Saddle Casting: Caltrans QAI observed a JSW welder perform SMAW standard repair welding on exterior rib 3U section of W2E3 west deviation saddle casting portion. The repair welding areas have been excavated 2mm to 8mm depth. The proper filler metal used for SMAW is LB62 with 5mm diameter

electrode made by Kobe, Japan. The entire casting portion is preheated to a temperature at min 150C during repair welding. Based on Caltrans QA observation, the SMAW repair welding operation appeared to be in general compliance with requirements of ASME IX 2005.

W2W3 West Deviation Saddle Casting: - Caltrans QAI observed two welders perform grinding process on the excavation areas of exterior rib 5, 6, 7 and 8 sections. The purpose of grinding is remove all the contaminants from the surface such as slags, scale and oxide film produced by the gouging before multi NDT performing. Based on Caltrans observation, no discrepancies were noted.

Summary of Conversations:

As noted within the report above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy, who represents the Office of Structural Materials for your project.

Inspected By:	Pau,Wai	Quality Assurance Inspector
Reviewed By:	Lanz,Joe	QA Reviewer